The floods in the lower Rio Grande and the upper Willamette were well forecast and without serious consequence.

ATLANTIC DRAINAGE	River and station	Flood	Above stages		Crest		
Lehigh, Mauch Chunk, Pa		stage	From-	То—	Stage	Date	
Lehigh Mauch Chunk Pa 12 17 17 13.5 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 19 18 19 19 19 19 10 19 19 19	ATLANTIC DRAINAGE						
Dneonta, N. Y.	Lehigh, Mauch Chunk, Pa	12	17	17		17	
Towands, Pa. 10 17 17 17.0 17 18 22.8 17 17 17 17.0 17 17 17 17.0 17 17 17 17 17 17 17 1	Oneonta, N. Y	12	17				
Towands, Pa. 10 17 17 17.0 17 18 22.8 17 17 17 17.0 17 17 17 17.0 17 17 17 17 17 17 17 1	Bainbridge, N. Y	11					
Towands, Pa. 10 17 17 17.0 17 18 22.8 17 17 17 17.0 17 17 17 17.0 17 17 17 17 17 17 17 1	Binghamton, N. Y	14					
Harrisburg, Pa	Towanda, Pa	16					
James, Columbia, Va	Wilkes-Barre, Pa	20					
James, Columbia, Va	Harrisburg, Pa	17					
Saluda, Pelzer, S. C.	Unadilla, New Berlin, N. I	10					
Mississippi drainage	James, Columbia, Va	10					
Tuscarawas, Gnadenhutten, Ohio 9 1 3 11.4 1 Little Kanawha: Glenville, W. Va 23 16 17 33.6 18 Creston, W. Va 20 17 17 23.7 17 Scioto, Circleville, Ohio 10 (1) 2 11.5 1 Tippecance, Norway, Ind 6 16 16 6.2 16 French Broad, Asheville, N. C 4 16 16 6.2 16 French Broad, Asheville, N. C 4 16 16 6.4 16 Big Pigeon, Newport, Tenn 6 16 16 6.4 Illinois: Morris, Ill 13 15 20 14.9 6 Peru, Ill 14 (1) 7 23.4 Oct. 7 Henry, Ill 10 (1) 1 18.2 Oct. 8-9 Peoria, Ill 14 (1) 11 23.4 Oct. 8-9 Peoria, Ill 14 (1) 11 23.4 Oct. 8-9 Peoria, Ill 14 (1) 11 23.4 Oct. 8-9 Pearl, Ill 14 (1) 12 21.0 Nov. 23-24. Beardstown, Ill 14 (1) 12 22.0 Oct. 8-9 Pearl, Ill 12 (1) 12 22.0 Oct. 8-7 Petit Jean, Danville, Ark 20 16 18 21.9 Nov. 19 WEST GULF DRAINAGE Guadalupe, Victoria, Tex 16 1 1 17.8 Rio Grande: Rio Grande City, Tex 21 1 1 3 21.5 San Benito, Tex 21 2 3 23.3 23.3 23.3			10	10	1.0	10	
Little Kanawha: Glenville, W. Va. Creston, W. Va. Scioto, Circleville, Ohio. Scioto, Circleville, Ohio		9	1 1	3	11.4	1	
Glenville, W. Va	Little Kanawha	1	1 -			_	
Tippecande, Norway, Ind.	Glenville, W. Va	23	16	17	33.6	16	
Tippecande, Norway, Ind.	Creston, W. Va	20				17	
Tippecande, Norway, Ind.	Scioto, Circleville, Ohio	10				1	
Big Pigeon, Newport, Tenn 6 16 16 6.4 16 Illinois: Morris, Ill 13 15 20 14.9 Oct. 7. Morris, Ill 14 (1) 7 23.4 Oct. 7. Nov. 19. Henry, Ill 10 (1) 1 18.2 Oct. 8-9. Nov. 19. Peoria, Ill 18 17 (2) 21.0 Nov. 22. Nov. 22. Havana, Ill 14 (1) (1) 21.2 Nov. 23-24. Heardstown, Ill 14 (1) (2) 21.0 Nov. 22-30. Second rise 20 26.25 Oct. 17. Nov. 29-30. Oct. 18.7 Pearl, Ill 12 (1) (1) (2) 20.4 Nov. 29-30. Pearl, Ill 12 (1) (2) 22.0 Nov. 20.4 West Gulf Drainage - 18 21.9 Nov. 30 West Grande - 21 1 1 17.8 1	Tippecance, Norway, ind	1 6					
Illinois:	French Broad, Asheville, N. C	4					
Morris, III	Big Pigeon, Newport, Tenn	6	10	10	6.4	10	
Peru, III	Illinois:	19	15	-20	14.0	16	
Henry, Ill. 10 (1) 1 18.2 (1) 14.5 (2) 19.9 (1) Nov. 19. Peoria, Ill. 18 17 (2) 21.0 (1) Nov. 22. Havana, Ill. 14 (1) 11 23.47 (1) 0.00. 12. Beardstown, Ill. 14 (1) (2) 18.6 (1) Nov. 23. 24. (1) 18.6 (1) Nov. 23. 24. (1) 18.6 (1) Nov. 23. 24. (1) Nov. 23. 24. (1) Nov. 23. 24. (1) Nov. 23. 24. (1) Nov. 29. 30. (2) Nov. 29. (Doen 111	14					
Henry, Ill.	1 01 u, m	**					
Peoria, Ill	Henry, III	10				Oct. 8-9.	
Havana, III	• ,					Nov. 22.	
Havana, III	Peoria, Ill	18	17				
Beardstown, Ill	Havana, Ill	14					
Second rise				(2)			
Pearl, Ill	Beardstown, Ill	14	(1)	(4)			
Petit Jean, Danville, Ark	Becond rise	19	//				
Petit Jean, Danville, Ark	Pearl, III	. 12					
Guadalupe, Victoria, Tex.	Petit Jean, Danville, Ark	20				Nov. 17	
Rio Grande Rio Grande City, Tex.	WEST GULF DRAINAGE]	•		!	
Rio Grande City, Tex.	Guadalupe, Victoria, Tex	16	1	1	17.8	1	
San Benito, Tex	Rio Granda City Tay	21	1	1 1	3 21 5) 1	
Willamette, Eugene, Oreg. 12 30 (*) 14.0 30	San Benito, Tex.	21				2	
Willamette, Eugene, Oreg. 12 30 (*) 14.0 30 Santiam, Jefferson, Oreg 10 30 30 12.0 33	PACIFIC DRAINAGE			1			
Santiam Jefferson Oreg 10 30 12.0	Willemette Eugene Oreg	19	30	(2)	14 0	1 30	
	Santiam Jefferson, Oreg	10				30	

Continued from last month.
 Continued at end of month.
 Estimated.

MEAN LAKE LEVELS DURING NOVEMBER, 1926

By United States Lake Survey [Detroit, Mich., December 3, 1926]

The following data are reported in the Notice to Mariners of the above date:

	Lakes ¹							
Data	Superior	Michigan and Huron	Erie	Ontario				
Mean level during November, 1926: Above mean sea level at New York Above or below—	Feet 601.75	Feet 578. 22	Fcet 571. 52	Feet 245, 24				
Mean stage of October, 1926 Mean stage of November, 1925 Average stage for November, last	+0.07 +0.69	-0.10 +0.54	-0.17 + 1.07	+0, 31 +0, 93				
10 yearsHighest recorded November	-0.48	-1.61	-0.14	0.09				
stage	-1.76 +0.69	-4.70 +0.54	-2.15 + 1.07	-2.58 + 1.83				
ber level from the October level	-0.17	-0.27	-0.26	-0.25				

¹ Lake St. Clair's level: In November, 1926, 573.92 feet.

EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, NOVEMBER, 1926

By J. B. KINCER

General summary.—During the first 10 days of the month the generally fair weather was favorable for field work, and good progress was made in seasonal farm operations, except that near the close of this period there was considerable interruption by widespread rains over the eastern half of the country. Temperatures were also favorable for drying out corn in the central valley States, and frost damage was of minor consequence. It continued too dry, however, in the west-central Great Plains, and moisture was needed in parts of the Southeast, while severe drought continued in the western Great Basin.

About the middle of the month generous to heavy rains in the Southeast relieved droughty conditions that had prevailed in much of that section, the rains being especially welcome in Virginia and the Carolinas. Widespread precipitation east of the Great Plains interrupted farm work during the middle portion of the month, but conditions continued especially favorable for livestock

over the great western grazing districts.

In the interior valley States the latter part of the month had less precipitation and warmer weather than previously, which made better conditions for seasonal farm operations. In the South, the weather was generally favorable but in the more northern States from the Great Plains eastward cold weather and frequent precipitation were unfavorable. In the south Atlantic area the warm, dry, and sunny weather, following the previous rains, made ideal conditions for winter truck crops and cereals, and there was little interruption to field work. The droughty conditions in the west-central Great Plains continued at the close of the month, but generous to heavy precipitation in nearly all sections west of the Rocky Mountains was favorable.

Small grains.—Early-seeded winter wheat came up to a good stand generally in the central valley States and the Great Plains, and the month, on the whole was favorable for the crop, except that in the extreme western portion of the belt moisture was deficient. About the middle of November precipitation benefited the lower Missouri Valley, and the increased moisture in the far Northwest improved wheat, especially in the North Pacific Coast States. In the eastern Wheat Belt the crop made rather slow growth during the middle and latter parts of the month, but the early-seeded generally did well.

Corn.—During the first part of November the corn crop dried out very well under the influence of the prevailing fair weather, but after the first week rain or snow over much of the belt was unfavorable, and the grain was too damp in many sections for proper cribbing. Some further molding in fields and cribs was reported from the Ohio Valley States, but housing progressed favorably in the Northwest and also in the western portions of the Corn Belt. During the latter part of the month the generally warm weather and occasional rain kept the fields soft and muddy in the East, and husking made rather slow progress, with some sections reporting further deterioration in quality.

Cotton.—Freezing weather in the northeastern portion of the Cotton Belt early in the month damaged some

late cotton bolls and stopped further development, but conditions generally were favorable for picking and ginning, and this work made good progress. Later in the month it was unfavorably cool, cloudy, and wet in the northwestern portion of the belt, and picking was interrupted, especially in Arkansas and eastern Oklahoma where considerable open cotton was blown out by high winds. At the close of the month the crop had been mostly gathered, except in the more northern districts, though there was considerable still out in the northwestern portion of the belt.

Miscellaneous crops.—In the central and eastern portions of the country meadows and pasture lands continued generally good for the season, but in the more western States unfavorable drought persisted and heavy feeding of livestock was necessary in some sections. The weather was favorable for truck in the winter trucking districts, while citrus fruits in Florida were favorably affected by prevailing conditions. The latter part of the month was favorable for sugar cane in Louisiana, especially where windrowed, but harvest made good advance.

CLIMATOLOGICAL TABLES 1

CONDENSED CLIMATOLOGICAL SUMMARY

In the following table are given for the various sections of the climatological service of the Weather Bureau the monthly average temperature and total rainfall; the stations reporting the highest and lowest temperatures, with dates of occurrence; the stations reporting the greatest and least total precipitation; and other data as indicated by the several headings.

The mean temperature for each section, the highest and lowest temperatures, the average precipitation, and

the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperatures and precipitation are based only on records from stations that have 10 or more years of observations. Of course, the number of such records is smaller than the total number of stations.

Condensed climatological summary of temperature and precipitation by sections, November, 1926

		Temperature •									Precipit	ation		
Section	average	Monthly extremes					average ure from ormal		Greatest monthly		Least monthly			
Section ave		Departure from the normal	Station	Highest	Date	Station	Lowest	Date	Section av	Departure from the normal	Station	Amount	Station	Amount
Alabama Arizona Arkansas California Colorado	53.6 47.2 56.6	° F. -3.5 +2.1 -4.4 +4.2 +0.7	2 stations 6 stations Corning Indio 2 stations	°F. 83 91 81 101 78	26 2 4 6 7 5	Valley Head Bright Angel Dutton Helm Creck Dillon	°F. 20 0 10 -2 -15	2 11 15 19 13 18	In. 4. 92 0. 22 3. 33 7. 69 0. 96	In. +1.84 -0.71 -0.32 +5.23 +0.10	Mobile Bright Angel Black Rock Upper Mattole Savage Basin	In. 8. 40 1. 73 5. 59 35. 65 4. 70	Evergreen 31 stations Amity 4 stations Rush	0.0 0.8 0.0
florida Jeorgia daho llinois ndiana	51. 7 39. 4 37. 7	-2.1 -2.8 +3.9 -4.4 -2.7	Saint Cloud 2 stations Rupert Harrisburg Vevay	91 87 73 71 78	1 8 5 14 15	Garniers Clayton Stanley White Hall Mount Vernon	$-15 \\ -1 \\ 1$	19 6 17 22 22	3. 12 3. 68 4. 05 3. 79 2. 10	+0, 82 +1, 03 +2, 11 +1, 37 -0, 99	Garniers Clayton Pyle Creek Elgin Thayer	6, 15 6, 85 11, 26 6, 42 4, 41	Fort Pierce Augusta Mud Lake Danville Huntington	1.7 0.3 1.4
owa Kansas Kentucky Jaryland-Delaware	40.3	-4.0 -3.8 -3.4 -4.1 -1.3	3 stations 2 stations Dix Dam Schriever Rock Hill, Md	71 82 80 84 78	2 5 6 14 14 14 15	Little Sioux Horton (near) Glasgow Tallulah 2 stations	-3 3 0 20 7	21 21 22 19 12	2. 10 1. 42 3. 41 3. 76 4. 33	+0.54 +0.24 -0.12 +0.27 +1.79	Davenport Hutchinson Junction City Angola Emmitsburg, Md	3. 88 3. 74 5. 57 6. 37 7. 54	Grinnell Elkhart Lockport Burrwood Friendship, Md	0.5
Aichigan Ainnesota Aississippi Aissouri Aontana	23. 9 50. 7 39. 6	-2.7 -6.2 -4.4 -4.9 +0.4	2 stations New Ulm Bay Saint Louis Marshall Sun River Canyon	68 66 82 78 76	2 14 2 5 26 25 5 5	2 stations Warroad 3 stations Bethany Busby	$ \begin{array}{r} -9 \\ -28 \\ 20 \\ 0 \\ -22 \end{array} $	11 27 2 19 21 21	3, 74 1, 56 4, 26 2, 98 1, 52	+1. 27 +0. 40 +0. 79 +0. 63 +0. 66	Kent City Pigeon River Bridge. Bay Saint Louis Williamsville Hebgen Dam	6. 68 4. 50 6. 12 6. 18 6. 28	Saint JamesAlexandriaPoplarvilleBethanyConrad	0. 1. 0.
Vebraska Vevada Vew England Vew Jersey Vew Mexico	45.7 38.2 42.5	$\begin{array}{c c} -2.9 \\ +5.0 \\ +0.5 \\ -0.4 \\ +1.0 \end{array}$	Dumas 2 stations 2 stations 2 stations Logan	79 86 72 76 83	5 2 6 18 2 9 16	2 stations Rye Patch Pittsburg, N. H Belleplain 2 stations	$-\frac{8}{8}$	21 14 28 2 12 2 15	1. 54 1. 47 4. 85 4. 04 0. 17	+0.80 +0.91 +1.41 +0.93 -0.44	Virginia_ Carson City_ Gardiner, Me_ Chatham_ Dulce	4, 57 5, 28 9, 28 7, 19 1, 43	Taylor Logandale Garfield, Vt Atlantic City 36 stations	0. 2. 2.
New York North Carolina North Dakota Dhio Dklahoma	47. 4 21. 5 40. 3	+0.7 -2.2 -5.1 -1.2 -2.9	Ohioville	74 80 68 77 85	8 14 2 5 15 25	Lake Placid Club. Banners Elk. Valley City. McArthur Goodwell.	-23	28 22 26 12 20	4. 09 4. 22 0. 65 2. 15 1. 05	+1. 22 +1. 83 +0. 07 -0. 48 -1. 11	2 stations Highlands Larimore Toboso Wyandotte	7, 25 7, 78 2, 00 4, 09 5, 28	Chuzy Lumberton Lisbon New Bremen Walters	1. T
Oregon Pennsylvania Louth Carolina Louth Dakota Cennessee	- 40. 4 - 50. 0 - 29. 0	+3.5 -0.6 -3.6 -4.6 -4.2	Marshfield 2 stations Georgetown Ottumwa Sevierville	78 79 85 75 78	1 15 8 5 14		-1 17 -14	13 12 12 21 2 22	7, 52 4, 49 3, 05 0, 78 5, 07	+2.76 +1.68 +0.74 +0.15 +1.73	Valsetz South Sterling Caesar's Head Sioux Falls Decatur	26. 76 9. 84 6. 11 2. 55 7. 20	Blitzen Newell Aiken McIntosh Halls	2. 1. T
Texas Jtah Zirginia Vashington Vest Virginia	41. 4 44. 2 42. 4	-2.0 +4.2 -2.2 +2.8 -2.0	Victoria_ Leeds (near) Diamond Springs La Center Fairmont	91 88 79 74 82	7 7 9 1 15		2 0 10	18 2 15 22 20 12	1. 38 1. 40 4. 41 5. 57 3. 59	-0.96 +0.44 +1.99 +0.56 +0.84	Lufkin Silver Lake Mount Weather Cushman Dan Sutton	4. 60 8. 82 7. 07 21. 09 6. 67	8 stations Hanksville Newport News Port Townsend Bluefield	- 0. - 1.
Wisconsin Wyoming	28. 4 34. 0	-5. 2 +2. 0	2 stations Pinebluff Pineb	67 75	² 6 4	Rest Lake South Pass City	-10 -21	11 17	2, 96 1, 04	+1.16 +0.49	Plum Island Moran		Ladysmith Barnum	
Alaska (October)	1	+ 3.8	Wonder Lake	73	12	Caudle	i	31	10. 66	+1.60	Latouche	34.75	Fairbanks	. O.
Hawaii		+0.8	2 stations	92	2.5	Kula Sanitarium	í	² 16	3. 99	-4.54	Honomanu Valley	16. 55	13 stations	1
Porto Rico	- 77. 1	+0.4	Comerio Falls	96	12	Aibonito	53	22	4.30	-2.91	Maricao	11.45	Mona Island	- 0.

¹ For description of tables and charts, see Review, January, 1926, p. 32.